

H-LaK8A 720503

nd =1.72000	vd =50.34	nF - nC =0.014302
ne =1.72341	ve =50.10	nF' - nc' =0.014439

Refractive Indices		
	λ (nm)	
n_r	706.5	1.71324
n_c	656.3	1.71568
$n_{c'}$	643.8	1.71636
n_{He-Ne}	632.8	1.71700
n_D	589.3	1.71987
n_d	587.6	1.72000
n_e	546.1	1.72341
n_F	486.1	1.72998
$n_{F'}$	480.0	1.73080
n_g	435.8	1.73785
n_h	404.7	1.74443
n_i	365.0	1.75579

Constants of Dispersion (Cauchy)	
A_0	2.8951998
A_1	$-1.1701218 \times 10^{-2}$
A_2	2.2126485×10^{-2}
A_3	3.8494791×10^{-4}
A_4	$-7.9808302 \times 10^{-6}$
A_5	1.5035116×10^{-6}

Relative Partial Dispersions			
$P_{d,c}$	0.3020	$P'_{d,c'}$	0.2517
$P_{e,d}$	0.2383	$P'_{e,d}$	0.2361
$P_{g,F}$	0.5503	$P'_{g,F'}$	0.4880

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0028
$\Delta P_{g,F}$	-0.0097

NHG	HOYA	OHARA	SCHOTT
H-LaK8A	LaC10	S-LaL10	N-LaK10

Chemical Properties	
	Group
RC(S)	1
RA(S)	3
DW	1
DA	3

Thermal Properties	
T_g (°C)	637
T_s (°C)	668
$T_{10}^{14.5}$ (°C)	591
T_{10}^{13} (°C)	626
$\alpha_{20/120^\circ C}$ ($10^{-7}/K$)	73.63
$\alpha_{20/300^\circ C}$ ($10^{-7}/K$)	84.43

Mechanical Properties	
Hardness ($10^7 Pa$)	607
FA (Relative Abrasion)	
Young's Modulus ($10^7 Pa$)	10941
Rigidity Modulus ($10^7 Pa$)	4233
Poisson's Ratio	0.292

Photoelastic Constant	
β ($10^{-12}/Pa$)	

Color	
λ_{80}/λ_5	37/31

Specific Gravity	
ρ (g/cm^3)	3.87

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.78	0.61
2200	0.927	0.86
2000	0.978	0.957
1800	0.993	0.987
1600	0.999	0.998
1400	0.999	0.998
1200	0.999	0.998
1060	0.999	0.998
1000	0.999	0.998
950	0.999	0.998
900	0.999	0.998
850	0.999	0.998
800	0.997	0.994
700	0.997	0.994
650	0.996	0.993
600	0.996	0.993
550	0.996	0.992
500	0.994	0.989
480	0.992	0.985
460	0.99	0.981
440	0.988	0.976
420	0.984	0.968
400	0.977	0.954
390	0.969	0.938
380	0.955	0.912
370	0.931	0.867
360	0.89	0.79
350	0.83	0.69
340	0.72	0.52
330	0.55	0.30
320	0.28	0.08
310		
300		
290		
280		



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